Part-Task Performance Measures

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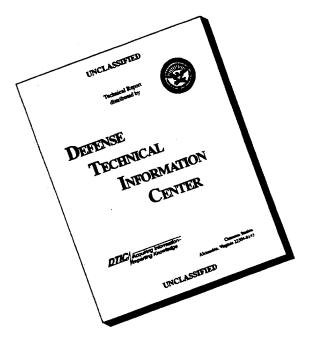
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14. ABSTRACT (Maximum 200 words):

The purpose of this Phase I SBIR project was to define and independently evaluate a subset of Army division-level command and control performance measures derived from the Army Command and Control Evaluation System (ACCES). The subset was measures which either directly or indirectly measure planning performance. The evaluation involved a determination of the degree to which this subset agreed with the overall ACCES evaluation of a division's planning performance and with battle outcomes. The intent was to help determine if this measurement subset was sufficiently robust to be applied independently in the laboratory to assist in evaluating planning aids. The subset was used to evaluate the performance of the G3 Plans section of a U.S. Army division during a large-scale command post exercise. The results are contained in this report.

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PART-TASK PERFORMANCE MEASURES

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PART-TASK PERFORMANCE MEASURES

Introduction

Various agencies are developing planning aids which will be tested in a laboratory environment where performance cannot be measured by battle outcomes or within the larger context of Division-level command and control. To support these evaluations, a set of internal performance planning measures (i.e., part-task performance measures) is required that focus on the Division-level operations planning function. These measures should closely relate to the comprehensive command and control performance measures embodied in the Army Command and Control Evaluation System (ACCES), thus providing additional credibility to the laboratory findings.

A tentative set of part-task performance measures, based on ACCES measures, has been developed. Values for these measures were calculated in conjunction with a recent ACCES application. This report provides an evaluation of these measures with respect to their suitability for the laboratory environment and their relation to battle outcomes.

Overview of ACCES

ACCES provides quantitative and objective assessment of:

The quality of the processes (and of the systems which support the processes) by which information is used by the commander and his staff in decision-making, and

The overall effectiveness of the decisions made and their implementation.

The essence of ACCES is a set of measures including a small number of measures covering overall command post effectiveness and a much larger menu of diagnostic measures covering specific aspects of the command and control process.

ACCES is based on a view that command posts are analogous to adaptive control systems in that they seek to influence their environment (consisting of other commanders and their staffs, plus the elements of METT-T--Mission, Enemy, Troops, Terrain, and Time) by means of the directives they issue to their subordinates. This view implies that the effectiveness of the command post can be judged by the viability of its directives. Good directives can be executed without the need for modification, beyond the contingencies built into them, and remain in effect throughout their intended period without the need for unanticipated changes. Secondarily, effectiveness can be judged by the timeliness of the processes that produce those

directives. Command posts that issue directives (i.e., changes in either missions, assets, schedules, or boundaries, or some combination of these) that prove effective (i.e., accomplish military missions) and/or permit flexible responses in rapidly developing situations (i.e., contingency planning) score well.

The measurement tool treats the command post as an adaptive control system, operating in control cycles, that seeks to keep selected features in its environment within expected boundaries. The general approach, as illustrated in Figure 1, is based on the fact that the command post performs a number of processes in order to support decisionmaking and its implementation.

Of particular significance is the fact that ACCES, in addition to measuring overall effectiveness, provides diagnostic scores for the quality with which each of the processes is performed. Figure 2 lists the processes for which ACCES provides scores, and shows attributes which are measured. In addition to individual command post scores, ACCES also provides for the evaluation of a network of command posts.

Overview of the Application

The ACCES application consisted of a command post exercise (CPX) during which a Mechanized Infantry Division operated in a Southwest Asian environment as part of a Corps in a general war situation. The CPX was a multi-level, 24 hour per day, free-play division-level exercise which lasted a total of 114 hours. The CPX was supported by the Joint Exercise Simulation System (JESS).

The Division's mission was to receive a battle handover from the Corps Covering Force, defend in sector to retain key terrain and destroy the enemy's first operational echelon, and then be prepared to counterattack to complete the destruction of enemy forces in sector. During the exercise the Division operated with three forward brigades (Left, Center, and Right). The exercise was characterized by steady pressure on the Right Brigade throughout the exercise, with an attempted enemy breakthrough near ENDEX; steady pressure on the Left Brigade throughout the exercise, with heightened activity on Day 4; and early, heavy pressure on the Center Brigade on Days 1 and 2, followed by little activity for that brigade the remainder of the exercise.

Performance Measures

Table 1 provides a listing and definitions of the part-task performance measures used to evaluate Division planning. These measures are based on the comprehensive command and control performance measures embodied in ACCES. A discussion of the rationale for each part-task performance measure follows.

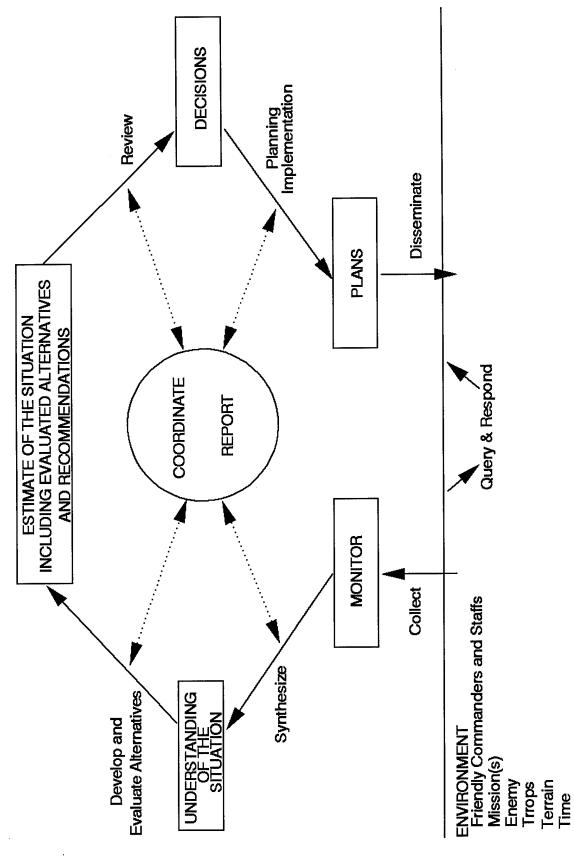


Figure 1. The command post as an adaptive control system

COORDINATION
MONITORING COMPARABILITY **NOT QUERIED** IMPACT ON PLAN FORECAST CORRECTNESS COMPLETENESS **TIMELINESS ACCURACY** QUERYING MONITORING

UNDERSTANDING TIME QUALITY IMPACT ON PLAN COMPLETENESS UNDERSTANDING

PREDICTION COMPLETENESS **MULTIPLE PLANNERS** PREDICTION QUALITY **MULTIPLE OPTIONS** PREDICTION TIME **ESTIMATE**

TIME FROM DECISION CONSISTENCY JNDERSTANDING COMPARABILITY TIME FROM DECISION NOT QUERIED CYCLE TIME TIME TIMELINESS

UNDERSTANDING COMPARABILITY MONITORING COMPARABILITY UNDERSTANDING QUERIES **DIRECTIVE COMPARABILITY** PLANNING COMPARABILITY CONFIGURATION NETWORK

Figure 2. Command and Control Processes Measured with ACCES

Table 1

Part-Task Performance Measures

<u>Measure</u>	<u>Definition</u>
Understanding Quality	The number of perceptions of the situation held by the staff section scored as percentage correct, not incorrect, or incorrect.
Options	The number of alternative courses of action considered most likely to occur in the future.
Planners	The number of staff members participating in the development of alternative courses of action.
Queries Required	Was additional (or more complete, timely, or accurate) data required to complete the planning process?
Plan Time Less Than Understanding Time	Was the Plan Time less than the Understanding Time?
	Plan Time: Median time from the making of an estimate to the end of the time covered by the associated predictions of intended futures.
	Understanding Time: Median time from expression of an understanding to the end of the period which the understanding covers.
Option Rejection, Commander	Was the recommended course of action rejected by the Commander?
Option Rejection, Other	Was the recommended course of action rejected by someone other than the Commander?
Lead Time Adequacy	Was the planning lead time provided to subordinates adequate? Adequate lead time was defined by the command, in this case, twice the senior headquarter's planning time.

Understanding Quality

An effective staff develops a set of hypotheses about what is going on in the environment (i.e., the elements of METT-T) in order to hedge against uncertainties. An understanding can be thought of as a set of hypotheses dealing with the current situation and the subsequent situation that will occur as a result of the current situation. The quality of understanding is described as correct, not incorrect, or incorrect. If the true situation is reasonably close to what the staff considers "most likely", the understanding is correct. If the true situation is not even included in the staff's set of hypotheses, the understanding is incorrect. An understanding is "not incorrect" if the true situation (or something close to it) is included in the staff's set of hypotheses, but not considered "most likely".

<u>Options</u>

Once understandings of the situation are identified, the staff develops a set of options, or alternative courses of action. Experience with ACCES has made it clear that the better decision processes are characterized by consideration of a number of alternative courses of action that are truely different in nature.

Planners

The development of alternative courses of action can be adversely affected by having too few planners involved in the process.

Queries Required

The staff's planning process is directly dependent on the information that is provided to it. The staff must recognize when data are incomplete, late, or inaccurate.

Plan Time Less Than Understanding Time

Understanding time refers to the period of time, extending into the future, for which the staff assesses and projects the situation; in effect, how far out in time the staff is looking. Plan Time refers to the period of time for which the plan is suppose to give direction. Plan Time must not be greater than Understanding Time, because, if it is greater, the staff is planning into an understanding void.

Option Rejection, Commander

The staff's estimate of the situation includes evaluating alternative courses of action and recommending the optimal alternative to the Commander. A rejection of the recommendation

would indicate that the staff had either not followed the Commander's intent or had produced a recommendation that was flawed in some other way.

Option Rejection, Other

In addition to the Commander, the staff's recommended course of action is generally reviewed by other personnel, e.g., the G3 and/or the Chief of Staff. They could also reject the recommendation.

Lead Time Adequacy

Any plan issued by the Division will require more detailed planning by the affected brigade(s) and other subordinate commands. Adequate time must be available to permit subordinates to complete their planning and prepare for implementation. The Division involved in the application described here considered adequate time to be two-thirds of the total planning time available.

Observed Planning Process

Throughout the application, observers were stationed in the G3 Plans Cell of the Division Main Command Post (DMAIN). In addition to their normal duties as ACCES Observers/Data Collectors, these observers completed a Planning Process Work Sheet for each observed planning event. Figure 3 provides a copy of the Planning Process Work Sheet.

The observers recorded the following ten planning events:

Counterattack Options. Prepared as part of the original Division Operations Plan.

Support to the Center Brigade. A surprise development when the enemy struck where the Division did not expect an attack.

Defense of the Left Flank. The Division's left flank was against an international border -- an allegedly neutral country. The Division Commander was concerned that enemy forces could flow through the "neutral" country and attack the Division's flank. He issued guidance to prepare for that contingency.

The Size of the Right Brigade Sector. The Division Commander was concerned that the size of the Right Brigade sector was too large for its Commander to effectively exercise control.

12. Does the Plan define outcomes victory, defeat or stale-mate and what happens next?		13. Analysis/wargaming description:	Disposition: 14. Time subordinates notified: 15. Time Plan scheduled to be completed:	16. Time Planning cycle ended:	Disposition:	Participant	ormation b		Mhy?	s? Why?
1. Time Planning begins:	2. Plan Title:	3. Mission Description:	5. Number of Planners participating in cycle: 6. Alternatives considered:		7. Contingencies considered:		Boes this plan establish new critical information requirements?	9. Did Planners query others for missing information?	10. Did the Commander reject this plan? Why?	11. Was the Plan rejected for other reasons?

Figure 3. Planning process work sheet

Deep Strike Planning. A deep strike was needed to deny the enemy use of a tunnel which would allow him to move his attack to the right. Another deep strike was needed to deny the enemy use of a bridge on his main supply route (MSR).

Cut Enemy MSR. When the Division initially failed to close the enemy MSR in the deep strike option, a more detailed plan was proposed to deny the enemy this asset.

Attack on the Tunnel. After the deep strike option failed, another attempt to close the tunnel was planned.

Use of a Separate Infantry Brigade (SIB). After the Division had been in contact with the enemy for approximately three days, and its own forces were reduced, the Division began planning for additional forces from the Corps reserve in order to sustain the defense.

Defense of Critical Road Junction. Due to the terrain in the Division's sector, a road junction was declared to be critical terrain. The Division planned a defense of the road junction against an anticipated airborne assault.

Reconstitution of the Division Reserve. Due to the size of friendly losses and the subsequent use of the Division reserve, the Division had to take some risks in order to have sustaining combat power (including asking Corps for its reserve force). Planning for reconstituting a Division reserve was required.

Evaluation of the Planning Process

Figure 4 provides an evaluation of these individual planning events using the part-task performance measures. The figure also provides a description of both the expected and the actual battle outcomes for each planning event.

The performance of the staff, as described by the part-task performance measures, was generally excellent; this is consistent with the Division's overall planning performance as evaluated by ACCES. Their plans were always based on multiple options and prepared with the input of multiple planners. When queries were required, they were completed. Plan Time was always less than Understanding Time. The staff's recommendations were generally accepted. Also, the lead time they provided to subordinates was always adequate.

Of the ten planning events observed, four resulted in battle outcomes significantly different from the expected outcomes.

The first two cases, Defense of the Left Flank and Defense of the Critical Road Junction, are examples of pure military judgement. Both of these are contingency plans involving preparation for "worst case" scenarios. The Division Commander had decided, during the intelligence preparation of the battlefield phase, that in order to protect his forces he had to prepare these plans. Tacticians assure security by taking precautions against surprise. They must use aggressive reconnaissance and maintain security forces to build contingencies to their force's advantage. Because this scenario had the Division spread very thin across a large piece of poor mobility terrain, movement time was figured in days, not hours. Thus, protection of the force was a very real problem. The Division Commander asked his G2 repeatedly if there were any signs of the enemy moving on the left flank or down toward the road junction. In the left flank case, there was some intelligence which caused the Division concern. First, there was a cross-border fly-over by enemy air, but no attack. Second, there was information that an enemy delegation had met with the neutral country's government. The intelligence associated with the critical road junction was not as compelling, although there were some reports of enemy planes loading airborne forces. Neither one of these contingencies occurred.

Two plans, Deep Strike and Reconstitution of the Division Reserve contained miscalculations on the friendly side. Regarding the Deep Strike, the officers planning the mission did not understand the types of weapon mix which the US Air Force could deliver on a target and, more importantly, what reasonable damage could be expected from a weapon. In both cases, the ordinance on-board the aircraft would not have damaged either the tunnel or the bridge to the degree required by the mission. Both of these targets were reconsidered in later plans (Cut Enemy MSR and Attack on Tunnel). The MSR bridge was, in fact, destroyed. However, the airmobile artillery raid on the tunnel was aborted due to heavy enemy fire against the helicopters. The original Deep Strike planning involved some wasted planning time, but probably did not affect the larger outcome of the Division's mission.

The planning event, Reconstitution of the Division Reserve, involved a misunderstanding of guidance

BATTLE OUTCOME	Option MACON moved the Center Bde forward. Option was used to support the tunnel raid.	As expected, a Bn TF was chopped to the Bde which repelled the attack. Division received Corps assets.	Enemy did not attack Division left flank.	Right Bde Commander maintained control of sector.
EXPECTED OUTCOME	if enemy penetrated PL STEEL, the Division would attack to restore the line.	Provide Bde with enough combat power to repel enemy attack without committing Division reserve.	Division left flank would be protected if enemy attacked.	The right sector of the Division area would be under effective control.
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PLAN	TITLE: Counterattack Options MISSION: Reestablish PL STEEL STIMULI: Initial planning, offensive operations BEGINNING TIME: Original Plan PLAN CYCLE TIME: 83h	TITLE: Support to Center Bde MISSION: Stop enemy attack STIMULI: Enemy attack BEGINNING TIME: 301655 PLAN CYCLE TIME: 15h, 15m	MISSION: Ensure Division left flank flank flank flank is protected sTIMULI: Enemy capability to attack Division flank BEGINNING TIME: 302219 PLAN CYCLE TIME: 8h, 50m	TITLE: Reduce Size of Right Bde Sector MISSION: Reduce span of control STIMULI: Commander guidance BEGINNING TIME: 011527 PLANCYCLE TIME: 10h

Figure 4. Evaluation of planning events using the part-task performance measures (1 of 3)

BATTLE OUTCOME	It was determined that artillery would not be effective on the bridge. Chemical munitions were not in position to be fired at the tunnel.	Use of GLLD on bridge was successful.	Mission was aborted after enemy shot down helicopters. Enemy was slowed by chemicals and FASCAM.
EXPECTED OUTCOME	Bridge would be dropped by artillery. Tunnel would be closed by chemical munitions.	Deny enemy use of a bridge on his MSR.	Chemical, artillery and FASCAM would deny enemy use of tunnel.
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PLAN	TITLE: Deep Strike MISSION: Deny bridge and tunnel to enemy STIMULI: Protect forces BEGINNING TIME: 011511 PLAN CYCLE TIME: 23h, 57m	TITLE: Cut Enemy MSR (bridge) MISSION: Deny enemy use of MSR STIMULI: Protect forces BEGINNING TIME: 031000 PLAN CYCLE TIME: 19h	TITLE: Attack on Tunnel MISSION: Deny use of tunnel to enemy STIMULI: Protect forces BEGINNING TIME: 031703 PLAN CYCLE TIME: 12h, 36m

Figure 4. Evaluation of planning events using the part-task performance measures (2 of 3)

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BATTLE OUTCOME	No such attack occurred	Corps began to reposition SIB closer to Division for possible employment with Division when ENDEX occurred.	Corps accepted risk by not chopping additional forces to Division.
LEAD TIME ADEQUACY LEAD TIME ADEQUACY EXPECTED OUTCOME	Repel enemy attack on critical terrain.	The Division would receive the SIB to increase combat power.	Reconstitute Division reserve.
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PLAN	TITLE: Defense of Critical Road Junction MISSION: Defend against enemy airbome attack STIMULI: Expect airborne attack against critical terrain BEGINNING TIME: 041921 PLAN CYCLE TIME: 11h, 9m	TITLE: Use of Separate Infantry Brigade (SIB) MISSION: Provide combat power to Division STIMULI: Loss of combat power BEGINNING TIME: 031200 PLAN CYCLE TIME: 48h	TITLE: Reconstitution of Division Reserve MISSION: Defend STIMULI: Maintain Division combat power BEGINNING TIME: 041531 PLAN CYCLE TIME: 20h, 30m

*Corps denied request for forces three times.

Figure 4. Evaluation of planning events using the part-task performance measures (3 of 3)

13

coming from Corps. Corps periodically gave the Division guidance that another unit would be provided to the Division from the Corps reserve. However, each time the Division formally asked the Corps for the unit the answer was either "no" or "not yet". The Corps Commander was waiting for the situation to develop. At the end of the exercise, the Corps had begun to reposition a unit into the Division area, but had not yet given the Division operational control. Had the game continued another 6-12 hours, the unit would have become part of the Division. The Commander did maintain a small Division reserve throughout the majority of the exercise.

In three of the observed events where battle outcomes generally were consistent with the expected outcomes, the evaluation of the planning process by the part-task performance measures resulted in less than perfect scores.

Planning for support to the Center Brigade began as somewhat of a surprise. The Division did not expect to receive early fighting in the Center Brigade sector. When it occurred, the Division began to maneuver units to aid the brigade, but Center Brigade's sector was very large and the terrain was hard to negotiate, so it took some time for reinforcements to get into position. The fighting did not appear very intense. At one point, the Division Commander stated that a single battalion could handle the fight. The fight lasted less than 24 hours. The G2 advised the Commander several times that this was not the main attack. The enemy sustained some losses in this battle and did not pursue the attack in the Center Brigade sector. Throughout, the enemy showed no signs of building up forces behind those in contact. The enemy quickly abandoned this fight to pursue attacks in other areas of the Division and did not push at the Center Brigade again during the exercise.

On the second day of the exercise, the Division Commander issued guidance to reduce the size of the Right Brigade's sector. The staff developed options, but did not recommend that the Commander adopt any of the options. Both the ADC-M and the G3 advised against the plan. After discussing the situation with the Right Brigade Commander, the Division Commander dropped the idea.

The use of the Separate Infantry Brigade was closely related to the Reconstitution of the Division Reserve event. Initially the Corps planners directed the Division to plan for this unit. The Division was then

refused the use of the SIB by the Corps Commander. The same process was repeated through two more iterations. Just prior to ENDEX, Corps was positioning the SIB nearer to the Division boundary, but would not turn over operational control to the Division. The Division can not be faulted in this case as they were responding to what Corps told them to do.

Evaluation of the Part-Task Performance Measures

This application demonstrated the ability of the part-task performance measures to identify excellent performance on the part of the planning staff and to accomplish this independent of other, more comprehensive, command and control performance measures.

In those cases where the part-task performance measures identified less than optimal performance, battle outcomes were generally significantly different from the expected outcomes.

Although additional investigation is required, the results to date give indication that the part-task performance measures could be used to evaluate planning aids in a laboratory environment where performance cannot be measured by battle outcomes or within the larger context of Division-level command and control.

APPENDIX A

PLANNING PROCESS WORK SHEETS

	Plan Number
Time Planning begins: Organiac P	VAN
Plan Title: COUNTER ATTACK OF	CCONS
Mission Description: ReesTASLIS	PLSTEEL
Planning Stimulus: INTIAC PLAN	UNINS
Number of Planners participating in	cycle: 5
Alternatives considered:	Disposition:
CATK Liberty (12 Bde)	NOTUSED
CATIC VANGUARD (2" Bde)	NOTUSED
CATK FRED (ZelBole)	Notused
CATK MACON (48 Bde)	TUNNEL KAID
CATK PANTHER (48/2 Ade)	NOT VSed
Contingencies considered:	Disposition:
Does this plan establish new critic requirements?	cal information
No	
Did Planner query others for missir	ng information?
Did the Commander reject this plan?	
Was the Plan rejected for other rea $oldsymbol{\omega}_{\mathcal{O}}$	sons? Why?
By Whom:	
-	-

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13.	Analysis/wargaming de	
14.		tified:
15.	Time Plan scheduled	to be completed:
16.	Time Planning cycle	ended: <u>032309</u>
	Observer:	
		Process Notes
	Participant	Contribution
a.	C, Plans	Guidance.
ъ.	Plan OFF	Options
с.	PLAN OFF	6 ptions
d.	PLAN OFF	_options
e.	Planoff.	Travel Times
f.		
g.		
C a 1 i	ent Points:	
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	Plan Number
Time Planning begins: 30/6 55	
Plan Title: Support To 48 Bde	Marketona.
Mission Description: Reintorce	48 Bde
Planning Stimulus: Eveny Conti	nc (
Number of Planners participating in o	cycle: 5
Alternatives considered:	Disposition:
Chap 3-69 Ad	Bestopecon Us
Chap 3-69 Ad Chap 7-12/ INCANTER	
Contingencies considered:	Disposition:
Desertion Plan	vsed,
3-69 Auror Added StrensTh	used.
Does this plan establish new critical requirements? Will Eveny Metacle	
Did Planner query others for missing	information?
Did the Commander reject this plan?	Why?
Was the Plan rejected for other reason N_{∂}	ons? Why?
By Whom:	
by whom:	

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		notified: <u>0/0730</u>
	Time Plan scheduled	
		e ended: 010814
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		Process Notes
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	609	Evidove
	-9	CEVIARACE
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lien	t Points:	
		

	Plan Number 3
Time Planning begins: 302219	
Plan Title: Defense of Lett Fi	aule
Mission Description: ENSURE Divi	Sion)'s Left Flan
Planning Stimulus: 66 Concerd	_
Number of Planners participating in cy	cle: <u> </u>
Alternatives considered: ATTACL 3-69 AT MOVE 2-1011A, TO Block	Disposition:
more 48 Bde	
CATE SW	
PUBLOUT TO N.W.	
Contingencies considered:	Disposition:
Does this plan establish new critical requirements?	information
Did Planner query others for missing i	nformation?
Did the Commander reject this plan? W	
Was the Plan rejected for other reason	
Dr. Whom:	

12.	mate and what happ	outcomes victory, defeat or stale- ens next? Clough Division manufactured
	Some Forces	CAPABLE OF RESPONSING
13.	Analysis/wargaming de	scription:
14.	. Time subordinates not	ified:
15.	. Time Plan scheduled t	o be completed:
16.	. Time Planning cycle e	nded: 010710
	Observer:	
	P	rocess Notes
	Participant	Contribution
а.	C, Plans	Guidance
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g.	G-Z BDA	Intellegen
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		Plan Number 7
	Time Planning begins: 0/15//	
	Plan Title: Deep Stake	_
	Mission Description: Deny Brids	ad TUNNER
	Planning Stimulus: Requirement TO P.	ctout forces
	Number of Planners participating in cy	
	Alternatives considered: ARTICLEM ON TUNNEL	Disposition:
•	Artillery on Bridge	ATTEMPTED.
-	Chemical enturne	used.
	Contingencies considered:	Disposition:
	Lager guided Bows on Brisde	used.
	Does this plan establish new critical in requirements?	information
	Did Planner query others for missing in	formation?
_	oid the Commander reject this plan? Wh	

12.	Does the Plan definate and what he wo	annene movt?	- ·	
	NO C en Bridge delayed for	versed,	Novem clos	od; Eveny
13.	Analysis/wargaming	description:		
14.	Time subordinates	notified:		
15.	Time Plan schedule	d to be comple	ted:	***********
16.	Time Planning cycl	e ended: <u>oて</u> /	1507	
	Observer:			
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Salie	ent Points:			
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	Plan Number 5
Time Planning begins: 0//527	
Plan Title: Size or 2nd Bde See	TOA
Mission Description: Reduce Size. Command and Control	of 2 HBde
Planning Stimulus: (G - Span 1= 0	
Number of Planners participating in cy	ycle: <u>5</u>
Alternatives considered: Move 2-10/1NTO POSITION LEFT OF 2Ble Move 3-65 and INPANTON TE	No. osel
TF PAIGN (USE OF DIAC)	N.F. U.S.ed.
Contingencies considered:	Disposition:
Does this plan establish new critical requirements?	information
requirements?	
Did Planner query others for missing	information? Why?
Did Planner query others for missing Sole 5-3 and Door	information? Why? S NOT NECESSARY CONTINUATE

Analysis/wargaming description: Time subordinates notified: OZO/30 Time Plan scheduled to be completed: Time Planning cycle ended: OZO/3D Observer: Process Notes Participant Contribution C.G. Contribution Contribution C.G. Contribution C.G. Contribution C.G. Contribution Contribution Contribution Contribution Contribution Contribution Contribution Contr			ppens next?
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Time subordinates notified: 020/30 Time Plan scheduled to be completed: Time Planning cycle ended: 020/30 Observer: Process Notes Participant Contribution			
Time Plan scheduled to be completed: Time Planning cycle ended: 020130 Observer: Process Notes Participant Contribution C. C	. Ana	lysis/wargaming	description:
Time Plan scheduled to be completed: Time Planning cycle ended: 020130 Observer: Process Notes Participant Contribution C. C			
Time Plan scheduled to be completed: Time Planning cycle ended: 020130 Observer: Process Notes Participant Contribution C.G. Contribution C			
Observer: Process Notes Participant Contribution C.G. Guidance. C. Plans Plans of E Ancient Contribution	. Tim	e subordinates r	notified: 020/30
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lient Points:	<u></u>	-3	OPTIONS
	<u></u>	-3	OPTIONS
		-3	OPTIONS

	Plan Number 6
Time Planning begins: 03,00	00
Plan Title: Cor Every n	15R-Bridge.
Mission Description: Deny	
Planning Stimulus: Proces	Forces
Number of Planners participation	ng in cycle: <u>//</u>
Alternatives considered: ART: Kery	Disposition: would not complete Ac
Chemicac	
BAT	
CA5	NOT AURILABIA
moverick	
GLLD	vs ed.
Contingencies considered:	Disposition:
Does this plan establish new corequirements?	ritical information
	issing information?
Did Planner query others for m	plan? Why?

12.	mate and what happens	tcomes victory, defeat or stale-s next? 4 ad To deny vseo,=
	Dridge TO EN	eng (
13.	Analysis/wargaming desc	ription:
14.	Time subordinates notif	ied:
15.	Time Plan scheduled to	be completed:
16.	Time Planning cycle end	ed: <u>03 7000</u>
	Observer:	
	Proc	cess Notes
	Participant	Contribution
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	Plan Number_/
Time Planning begins: 03/200	
Plan Title: Use of 51B	******
Mission Description: <u>Provide com</u> The Division	but Powerto
Planning Stimulus: 609506 Force	S.
Number of Planners participating in c	ycle: <u>5</u>
Alternatives considered:	Disposition:
move Tource OF INFANTON DIN GNESISTO DIVISIÓN OFCOM	
Contingencies considered:	Disposition:
Does this plan establish new critical requirements?	
Did Planner query others for missing :	
Did the Commander reject this plan? We	√hy?
Was the Plan rejected for other reason COUPS PRICE OPTION MAINTAIN VAITERS CO	ns? Why?
By Whom: G-3	

·	mate and what happ	
•	Analysis/wargaming de	scription:
•	Time subordinates not	ified:
•	Time Plan scheduled t	o be completed:
•	Time Planning cycle e	ended: <u>05/200</u>
	Observer:	
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	Participant	Contribution
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1 f 6	ent Points:	

Time Planning begins: 03/703	-
Plan Title: ATTACK ON TUN	Nel
Mission Description: Deny ENE To more Tuengs and	
Planning Stimulus: Instruct Ore	· •
Number of Planners participating	in cycle: <u>ぢ</u>
Alternatives considered:	Disposition:
C#5	NOT AUACLABLE
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GLLD	NUT DURILABIE
46B	NOTAL ALLAS
ARTICLEY	vsed.
denical	usel.
Contingencies considered:	Disposition:
Does this plan establish new crit requirements?	cical information
Did Planner query others for miss	sing information?
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Did Planner query others for miss	sing information?
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Did Planner query others for miss Other was dead This Decree Die	sing information? Cop Battle Not Not Take A Tron
Did Planner query others for miss Diac was dend This December Die	sing information? See Bactle Not Not Take A Trond an? Why?

12.	. Does the Plan define outomate and what happens	omes victory, defeat or stale- next?
13.	. Analysis/wargaming descri	ption:
14.	. Time subordinates notifie	ed:
15.	. Time Plan scheduled to be	completed: 040539
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	Observer:	
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	<u>Participant</u>	Contribution
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Sal	lient Points:	
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	Plan Number	
Time Planning begins: 04153/		
Plan Title: Reconstitution of Reserve		
Mission Description: Division Reserve Force		
Planning Stimulus: Corps pev//s Fi	sue Division VSINS AS	
Number of Planners participating i	n cycle: 4	
Alternatives considered:	Disposition:	
TF 3-69 ON Ghour STring	NOTUS ecl.	
CAU From Read Aven MSM	<u>CG-NO</u>	
REQUEST IBN From SIR Put 3-507 ON 6 hour STEED	corps No VSecl	
Contingencies considered:	Disposition:	
Does this plan establish new criticequirements?	cal information	
oid Planner query others for missi	ng information?	
oid the Commander reject this plan	? Why?	
as the Plan rejected for other re	asons? Why?	

12.	Does the Plan define mate and what hap	outcomes victory, defeat or stale- opens next?	
13.	Analysis/wargaming o	lescription:	
14.	Time subordinates no	otified: <u>04(659</u>	
15.	Time Plan scheduled	to be completed:	
16.	Time Planning cycle ended: 05(200		
		Process Notes	
	Participant	Contribution	
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с.	Plans OFF	Oftions	
d.e.f.	Plans OFF	Oftions	
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c. d. e. f.	Plans OFF Plans OFF	Oftions	
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Plan Number / O ı. Time Planning begins: 04192/ Plan Title: Defense of Criticac Road Tunction 2. Mission Description: Detend AGAINST ENEMY AIRBORNE 3. ATK Planning Stimulus: Defense of Continue Teacher 4. Number of Planners participating in cycle: 5 5. Alternatives considered: Disposition: 6. Hold 44 Ble MOVE TFIOL TO Y Mam to hold man Contingencies considered: Disposition: 7. Does this plan establish new critical information 8. requirements? Did Planner query others for missing information? 9. Did the Commander reject this plan? Why?

Was the Plan rejected for other reasons? Why?

By Whom:

mate -	and what ha	ne outcomes victory, defeat or stale- appens next?		
		description.		
,	Time Plan scheduled to be completed: Time Planning cycle ended: 250830			
		Trocess Notes		
<u>Pa</u>	rticipant	Contribution		
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